BRITISH STANDARD 5837TREE SURVEYS ARBORICULTURAL IMPLICATION STUDIESTREE INVENTORIES AND RISK ASSESSMENTSWOODLAND MANAGEMENT PLANS

TPO/PLANNIG ADVICE/ PROJECT MANAGEMENT TREE PLANTING SCHEMES TPO RE-SURVEY





### ARBORICULTURAL IMPLICATIONS ASSESSMENT

### PROPOSED DEVELOPMENT

AT

10 THE LAWNS BOWDON WA14 2YA

> Author: C. Salisbury Date: 4 February 2021 Ref: TRE/10TL



Mulberry Adamson House, Towers Business Park, Wilmslow Road, Didsbury, M20 2YY

T 0161 955 3628
 F 0161 955 4201
 E info@mulberrytmc.co.uk

www.mulberrytmc.co.uk

#### 1.0 Introduction

- 1.1 Mulberry Tree Management were instructed by S Garside, to carry out an arboricultural survey of trees at their site in The Lawns, Bowdon.
- 1.2 This report details the arboricultural implications of developing the site, including:
  - a survey of the trees on and near the development which may impact the proposal from ground level, noting their location, species and all relevant parameters, i.e. stem diameter, height, crown spread, condition etc;
  - providing advice on the removal, retention and management of trees;
  - assessment of the potential effects of the proposal on retained trees and vice versa;
  - assessment of the requirement for tree protection for the duration of the works;
  - mitigation for any loss;
  - preparation of a tree schedule;
  - and report on the above matters.
- 1.3 The survey was carried out on 15 January 2021 by means of inspection from ground level by an experienced and qualified arboriculturalist. The inspection can be restricted in cases where trees were Ivy clad or surrounded by vegetation.
- 1.4 Under *BS5837: 2012 Trees in Relation to Construction -Recommendations*, the assessment of trees is made objectively. The tree categorisation method identifies the quality and value of the existing tree stock, allowing informed decisions to be made concerning development design layout.
- 1.5 The following documents have been made available by the client:
  - Drawing- TOPO.dwg
  - Drawing- 10 the Lawns Proposed Site Layout.dwg
- 1.6 The supplied drawing included some tree positions plotted. Any dimensions regarding tree positions and protective fencing must be checked on site.
- 1.7 Weather conditions during the survey were dry and still.
- 1.8 The survey was carried out noting the conditions of the trees at the time of inspection. As trees are part of the natural environment, conditions can naturally change; therefore the contents of this report are valid for one year only. After this period, re-inspection may be necessary.

#### 2.0 Survey Methodology

- 2.1 The trees were surveyed (prefixed T, or G for group) and recorded in the tree schedule in appendix one. Where groups are recorded, average height and diameter at breast height (DBH) of the trees in the group are reported. Where access to the base of any trees was limited, stem size was estimated.
- 2.2 All the trees were assessed using: a grading A to C (retention) and U (removal); condition and age class as defined in appendix two.
- 2.3 Where appropriate, canopy spread for each tree was recorded at four cardinal points in order to reproduce an accurate representation of the crown shape of the tree on the tree plan in appendix three.
- 2.4 The survey included all trees within the proposal area and trees near to the proposal.

#### 3.0 Development Proposals

- 3.1 Due to the proposed development and its associated infrastructure there are a number of locations where the proposals are in close proximity to the trees surveyed. The Site Layout Plan within appendix three identifies the trees in relation to the proposed development.
- 3.2 In order to fully assess the impact of the proposals an Impact Table has been created detailing each tree, which shows the proximity of the associated works to the tree.
- 3.3 This can then be assessed in accordance with BS 5837:2012 to determine whether the development will have a detrimental impact on the health of each tree. Once this has been determined remedial measures can be detailed to reduce the impact the proposals will have on the treescape.

#### 3.4 Impact Table:-

Tree No.	Root Protection Area identified in Table 2 of BS 5837:2012	Distance to Proposed Hard Standing (m)	Distance to Proposed Development (m)	Can the Tree/s be Successfully Retained
T1	10m <sup>2</sup>	N/A	8.70	Yes
T2	391m <sup>2</sup>	N/A	14.00	Yes
Т3	203m <sup>2</sup>	N/A	2.00	Yes as outlined in section 5.1 below
T4	408m <sup>2</sup>	N/A	4.80	Yes as outlined in section 5.1 below
Т5	275m <sup>2</sup>	N/A	3.60	Yes as outlined in section 5.1 below
H1	1m <sup>2</sup>	N/A	3.00	Yes

#### 4.0 Impact Assessment

4.1 To assess the implications of the Impact Table each tree can be categorised in the following way: -

	Trees to b	pe retained	Trees to be removed		
	With No Impact	With detailed construction	Due to Condition	Due to Development	
Tree No.	T1, T2 & H1	T3, T4 & T5	N/A	N/A	

#### 5.0 Mitigation Proposals

#### 5.1 **Property Construction**

5.1.1 The impact table below shows the proposed development having a minor encroachment into the root protection area of T3, T4 & T5. It is felt that due to the species, condition and limited extent of encroachment the proposal will not have a detrimental impact on the safe useful life expectancy of these trees.

5.1.2 Section 7.5.3 of BS 5837:2012 advises that where a slab or minor structure is to be formed within the RPA it should not exceed 20% of any existing unsurfaced ground. The table below details the amount of encroachment within the RPA.

Tree No	Total Area m2 of RPA	Total m2 of Structure within the RPA	Percentage of Structure within the RPA
Т3	203 58.20 (unsurfaced)	4.40	7.60%
T4	408 198.70 (unsurfaced)	3.70	1.90%
T5	275	5.20	1.90%

5.1.3 As you can see form the table above the proposed structure does not exceed 20% of the RPA. It is therefore felt that the proposed development will not have a detrimental impact upon the existing trees.

#### 6.0 Conclusions and Arboricultural Recommendations

- 6.1 The tree categorisation method identifies the quality and value of the existing tree stock but it is not meant to be interpreted rigidly and is presented in order to form a balanced judgement on tree retention and removal.
- 6.2 A precautionary method of working near trees is detailed in the accompanying Arboricultural Method Statement.
- 6.3 Following site development, regular (annual or biannual) inspections of all retained trees should be undertaken by a qualified Arboricultural Consultant.
- 6.4 It is considered that in following the advice in this document, any negative factors affecting trees on the site will be minimised.

## **Appendix One**

### **Tree Survey Schedule**

#### TREE SURVEY SCHEDULE

Arboric	Arboricultural Data Sheet: Date of Survey: 15/01/21 Surveyor: C. Salisbury												
Tree		DBH	Height		Crown Spread (m)		m)	Crown	Condition	Comments and preliminary management	Estimated	Tree quality	
No.	Species	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		recommendations	remaining contribution	category rating							
T1	Cherry	150	4.60	SM	2.0	2.5	2.0	2.0	2.00	В	An individual ornamental specimen which has been reduced in the past.	20 – 40	C2
T2	Lime	930	18.60	FM	6.0	5.0	5.5	5.5	3.50	B/C	An individual twin-stemmed specimen situated adjacent to a highway.	20 – 40	A2
Т3	Lime	670	18.20	FM	5.5	5.0	5.5	4.0	5.00	В	A co-dominant twin-stemmed specimen situated adjacent to a highway.	20 – 40	A2
Τ4	Maple	950 est.	18.20	FM	7.5	6.0	6.0	5.5	5.00	В	A co-dominant twin-stemmed specimen situated within an adjacent property adjacent to a highway.	20 – 40	A2
T5	Horse Chestnut	780 est.	13.80	FM	3.5	4.0	7.0	4.0	6.00	B/C	An individual specimen situated within an adjacent property. This tree is showing early signs of Bleeding Canker.	20 – 40	B2
H1	Laurel	40 avg.	2.50	Y/SM	-	-	-	-	0.00	B/C	A well-maintained boundary hedge.	40 – 60	C2

## **Appendix Two**

**Tree Survey Key** 

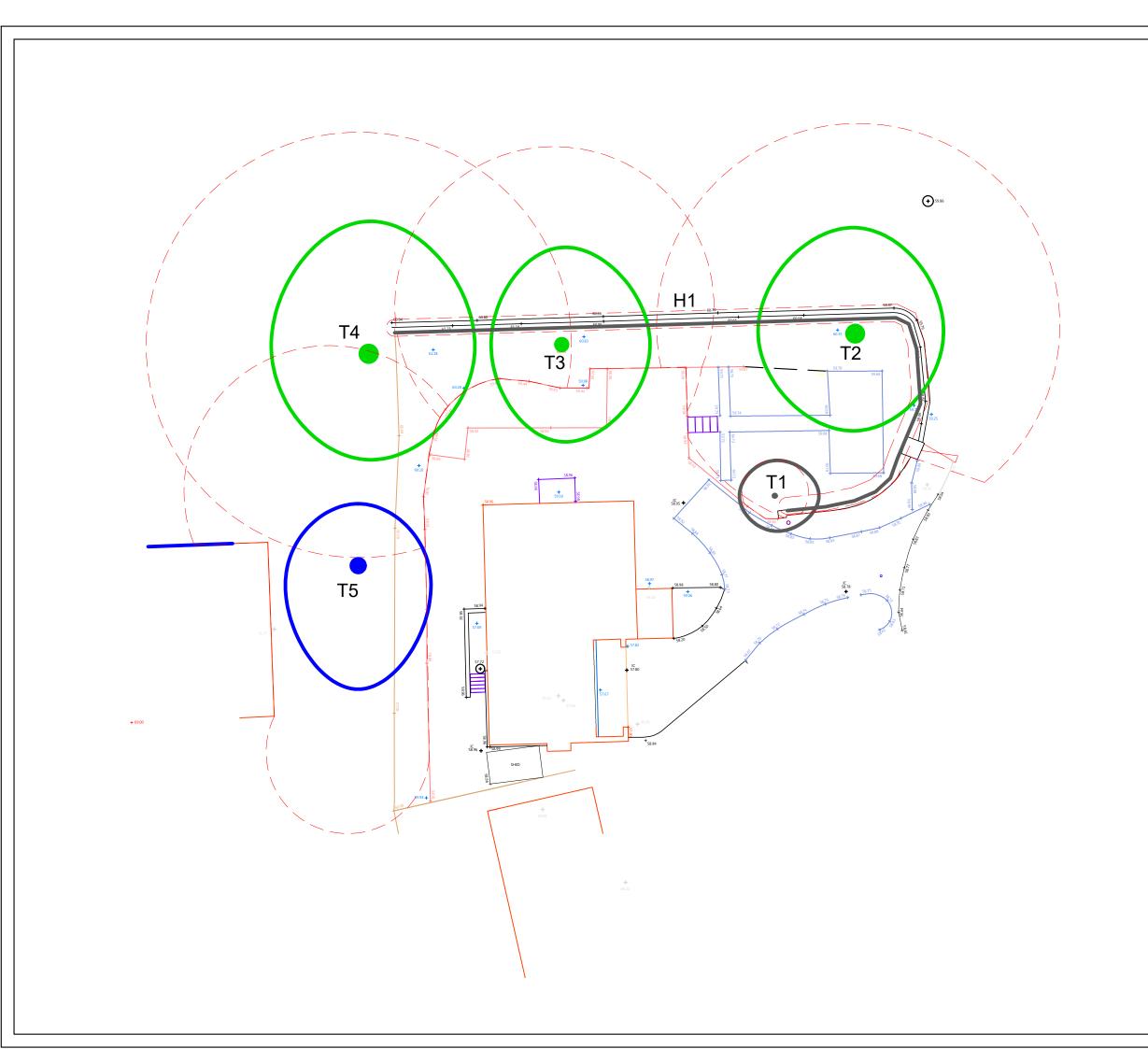
Trees for removal			
Category and definition	Criteria		
Category U Those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management Trees to be considered for retention Category and definition	Trees that have a serious, irremediable, stru unviable after removal of other R category tr Trees that are dead or are showing signs of Trees infected with pathogens of significance suppressing adjacent trees of better quality	ctural defect, such that their early loss is expected due to collaps ees (i.e. where, for whatever reason, the loss of companion shelf significant, immediate, and irreversible overall decline e to the health and/or safety of other trees nearby (e.g. Dutch eln priate (e.g. R category tree used as a bat roost: installation of bat	ter cannot be mitigated by pruning) n disease), or very low quality trees
		2 Landscape values	
Category A Those of high quality and value: in such a condition as to be able to make a substantial contribution (a minimum 40 years is suggested)	Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboriculture features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups)	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood pasture)
Category B Those of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested)	Trees that might be included in the high category, but are downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage)	Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboriculture features (e.g. trees of moderate quality within avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits
Category C Those of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150 mm	Trees not qualifying in higher categories <b>Note -</b> Whilst C category trees will usually no stem diameter of less than 150 mm should b	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit of be retained where they would impose a significant constraint o be considered for relocation	Trees with very limited conservation or other cultural benefits n development, young trees with a

#### Age Class

7.go (			Conc	dition
Y	Young	Trees that have not yet established	A	Good
SM	Semi-Mature	Established trees up to 1/3 of expected height and crown	В	Fair
EM	Early mature	Between 1/3 and 2/3 expected height and crown	С	Poor
Μ	Mature	Between 2/3 and full expected height and crown	D	Dead
FM	Fully Mature	Full expected height and crown		
OM	Over-Mature	Crown beginning to break up and decrease in size		
S	Senescent	Crown in advanced stage of break-up		

# **Appendix Three**

Plans





Category A Trees



 $\odot$ 

Category B Trees

Category C Trees

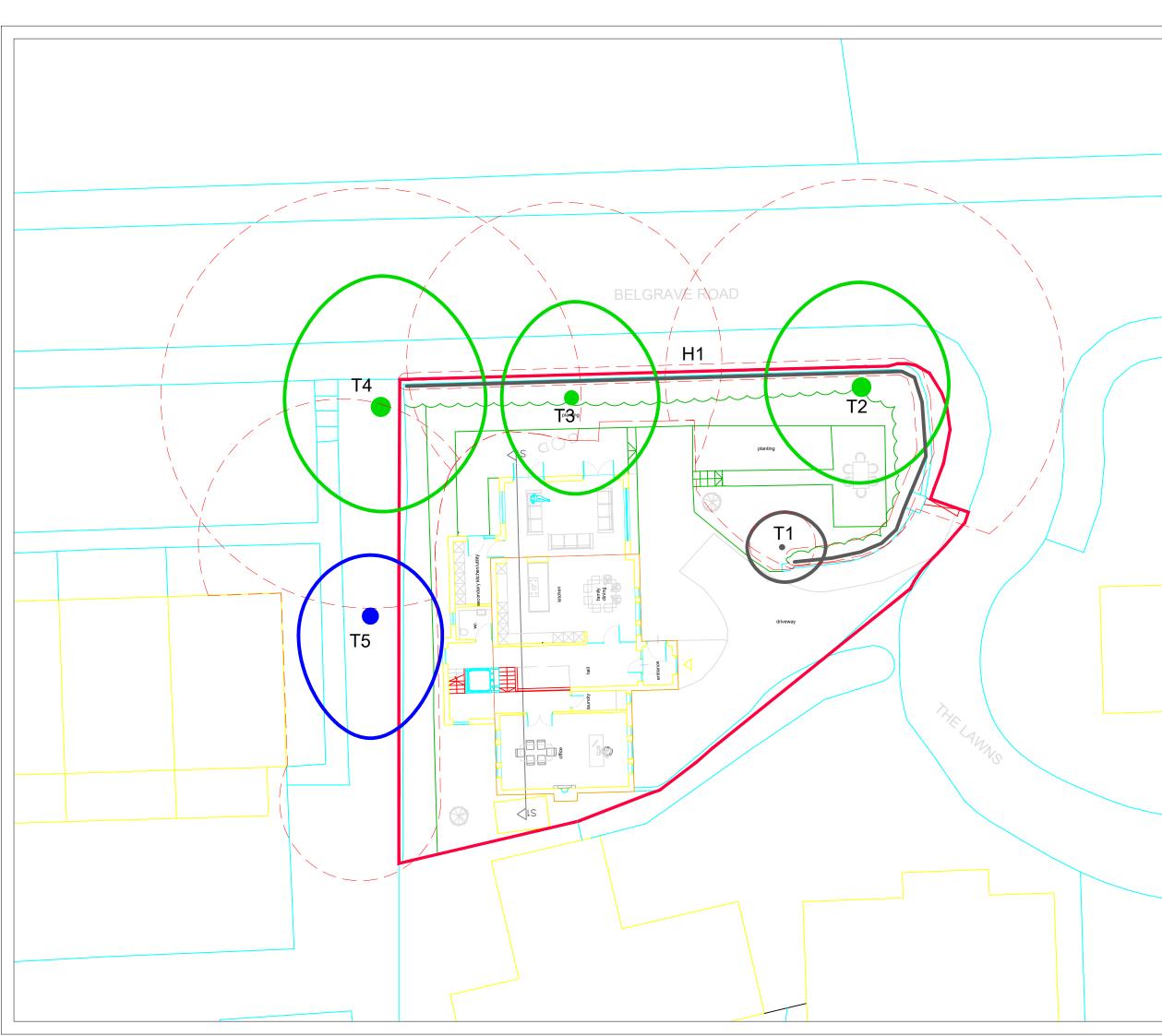




Category U Trees

Root protection area

Mulberry TMC Adamson House Towers Business Park Wilmslow Road Didsbury M20 2YY	mulberry			
Tel: 0161 955 3628 Email: info@mulberrytmc.	.co.uk			
Site Address: 10 The Lawns Bowdon				
Drawing Title: BS5837 Plan				
Drawing No: 10TLB/BS/01				
Date: Scale: 17/01/2021 1:200@A	Drawn by: 3 CS			
Note: Dimensions are not to be scaled from this drawing. All written measurements are to be checked on site by the contractor. Copyright Mulberry TMC. Note: All rights described in Chapter IV of the Copyright Design & Patents Act 1988 have generally been asserted.				





Category A Trees



Category B Trees

Category C Trees







Category U Trees



**Special Measures** 

Mulberry TMC Adamson House Towers Business Park Wilmslow Road Didsbury M20 2YY



Drawn by:

CS

Tel: 0161 955 3628 Email: info@mulberrytmc.co.uk

Site Address: 10 The Lawns Bowdon

Drawing Title: AIS Plan Drawing No:

10TLB/AIS/01

 Date:
 Scale:

 17/01/2021
 1:200@A3

Note: Dimensions are not to be scaled from this drawing. All written measurements are to be checked on site by the contractor. Copyright Mulberry TMC. Note: All rights described in Chapter IV of the Copyright Design & Patents Act 1988 have generally been asserted.